Monthly Review

Federal Reserve Bank of Boston

Autumn in New England: Litchfield Hills, Connecticut

New England's Gold Reserves and Interdistrict Payments

Gold reserves of the Boston Federal Reserve District have declined since 1942 both in dollar amount and as a per cent of the nation's total. The region can lose its gold reserves only if its payments to other regions exceed its receipts from them. An understanding of why a Federal Reserve District loses gold reserves must rest ultimately on the nature and amount of its external receipts and payments. This article outlines the relationship between gold reserves and interregional payments. It also presents an accounting of changes in the gold holdings of the Federal Reserve Bank of Boston by major types of payments for the period from 1934 to 1951. It is a necessary first step toward answering the question "Why are New England's gold reserves declining?"

A loss of gold reserves is evidence that a region has experienced an excess of payments over receipts. The Boston Reserve Bank has lost gold reserves in almost every year since 1942. Its share of the nation's monetary gold declined from over seven per cent in 1934 to 3.2 per cent at the end of August 1951. The loss of gold reserves has attracted attention recently because of its importance in the flow of interregional payments.

The Nature of Gold Movements

The interdistrict flow of gold results from the flow of private, governmental, or inter-Reserve bank payments between districts. Private payments may be completed by the transfer of currency or of demand deposits. A transfer of demand deposits occurs only after checks drawn against demand deposit accounts are collected from the drawee bank. A clearing mechanism to facilitate the collection of checks is therefore an essential part of a monetary system which is built predominantly on demand deposits.

The Federal Reserve Bank of each district provides for the clearing of checks among its member banks and the nonmember banks within the district which have deposited funds with the Reserve bank for this purpose. The Federal Reserve Bank performs the clearing function by crediting (increasing) the reserve accounts of banks presenting checks for payment and debiting (decreasing) the reserve accounts of the banks against which the checks are drawn. The clearing is thus completed through the reserves of the commercial banks. The assets of the Reserve bank are not affected. The final result is simply a reallocation of reserves among the commercial banks of the district.

When payments are made by check across district lines, claims arise between commercial banks which do not carry reserve accounts with the same Federal Reserve Bank. A single Reserve bank, therefore, cannot make offsetting debits and credits on its books to complete the collection. The Interdistrict Settlement Fund (formerly called Gold Settlement Fund) was devised to provide a means of settling such interdistrict claims within the Federal Reserve System. One Reserve bank credits a member bank's account with checks which the member bank has presented for payment, while the Reserve bank in another district debits the accounts of its member banks against which the checks are drawn. This procedure results in claims arising among Reserve banks. Such claims are settled in the Interdistrict Settlement Fund.

The Fund consists of each Reserve bank's gold certificate holdings which have not been set aside for the security of its outstanding Federal Reserve notes. The settlement of inter-Reserve bank claims is completed by the transfer of ownership of gold certificates on the books of the Fund from one Reserve bank to another.

Interdistrict clearings, therefore, result in a reallocation of gold reserves among the Reserve banks.

The movement of gold among Reserve banks within the Interdistrict Settlement Fund is the *net* result of numerous claims and counter-claims. This follows from the nature of the clearing process. All amounts due to others are set against amounts due from others. The difference is paid to or received from the Fund. Such differences are settled daily.

Interdistrict Settlement Fund data would portray the *gross* flow of funds between districts only if all payments had to flow through this mechanism. Many banks, however, still utilize their deposit balances with correspondent banks to effect a portion of their collections. Bankers customarily maintain their correspondent bank balances at a fairly stable level. If transactions handled through bankers' balances result in raising or lowering the balances above or below the customarily maintained level, action is immediately taken to restore the level. This action is usually in the form of a wire transfer through the Federal Reserve System. Thus, the *net* flow through bankers' balances is reflected in the Interdistrict Settlement Fund.

The gross payments through bankers' balances are, of course, unknown. They are not important, however, in this preliminary discussion of interdistrict money flows, because we deal here only with net figures.

Structure of Interregional Payments

Gains or losses of gold reserves are important for a region primarily because of their influence on its monetary structure. They take on added significance when one examines their role in the clearing of interdistrict payments. In this capacity they reflect the economic ties of a region with other sections of the country. They thus become the starting point for the detailed analysis of interregional payments which is essential for an understanding of economic interdependence.

Interregional payments may arise from (1) trade in commodities, (2) private capital transactions, (3) service transactions (transportation, education, insurance, interest), (4) gifts and miscellaneous private transactions, (5) Federal Government transactions, and (6) inter-Reserve bank transactions. Ideally, complete data for each of these categories of payments would be desirable in a study of interregional economic relationships. Because such data are not available, this study approaches the problem from an analysis of Interdistrict Settlement Fund transactions.

The records of the Reserve banks provide data for an analysis of Federal Government and inter-Reserve bank transactions. They also reveal the total gain or loss of gold reserves during a given period. We can arrive at column 2 in an accompanying table because the net result of all private transactions (the sum of items (1) through (4) above) must be the difference between the total gain or loss of gold and the gain or loss due to Government and Reserve bank transactions. The results from applying this procedure in the First District on an annual basis from 1934 through 1951 appear in the table.

A region's private commercial and financial, Treasury and inter-Reserve bank transactions (Federal Reserve notes, Open Market and Foreign account) are interdependent. For example, private economic activity both affects and is affected by the volume of Treasury transactions. Open Market transactions of the Reserve banks depend on changing economic conditions, but differ from payments in private and Government accounts because they are controlled by the monetary authorities. They may be modified to meet the needs of a particular Reserve bank. Column 5 shows the net effect of private and governmental interdistrict payments in this district.

Treasury Transactions (column 1) consist predominantly of transfers of funds from the Treasury's account at the Federal Reserve Bank of Boston to its accounts at other Reserve banks. When the Government spends more than it receives from taxes, security sales, and all other sources in a given Federal Reserve district, it must cover the resulting deficit by transferring funds from those districts in which it has an excess of revenues over expenditures. Until 1950 the Government consistently raised more money through taxes, borrowing,

FACTORS CAUSING GAIN (+) OR LOSS (–) OF GOLD RESERVES
Federal Reserve Bank of Boston, 1934 — August, 1951
(Millions of Dollars)

Year	Treasury Transactions	Private Commercial and Financial Transactions	Inter-Reserve Bank Transactions		Sum of Columns 1, 2, 3	Total Gain or Loss of Gold Reserves	Gold Reserve Balance (Year End)
			Federal Reserve Notes	Open Market and Foreign Account			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1934	– 101.2	+ 233.2	–16.3	+ 4.0	+115.7	+119.7	369.2
1935	– 26.0	+ 186.4	–13.1	+ 3.3	+147.3	+150.6	519.8
1936	– 110.0	+ 174.1	– 9.7	– 9.5	+ 54.4	+ 44.8	564.6
1937	– 214.0	+ 179.2	–15.3	– 4.4	– 50.1	– 54.4	510.2
1938	– 8.0	+ 168.9	–10.8	– 1.9	+150.1	+148.2	658.4
1939	– 70.0	+ 280.6	–14.4	+ 30.2	+196.2	+226.4	884.8
1940	– 158.3	+ 371.6	–12.9	+ 52.2	+200.4	+252.6	1,137.4
1941	– 372.2	+ 460.5	–19.6	– 39.6	+ 68.7	+ 29.1	1,166.5
1942	– 971.0	+1,285.1	–37.4	–275.5	+276.7	+ 1.2	1,167.6
1943	–2,116.5	+2,254.5	–47.9	–209.5	+ 90.1	–119.4	1,048.1
1944	–1,613.9	+1,921.5	–48.6	–387.8	+259.0	–128.9	919.2
1945	–1,970.2	+2,202.1	–33.9	–310.0	+198.0	–112.0	807.1
1946	–1,181.7	+1,233.5	–33.2	– 43.4	+ 18.6	– 24.8	782.3
1947	– 796.3	+ 919.2	–25.4	– 64.1	+ 97.5	+ 33.4	815.7
1948	– 750.0	+ 782.1	–22.9	– 13.7	+ 9.2	– 4.5	811.2
1949	– 218.7	+ 60.7	–15.1	+278.5	–173.1	+105.4	916.6
1950	+ 62.3	– 6.9	–31.3	– 94.6	+ 24.1	– 70.5	846.1
8/31/51	+ 67.5	– 15.7	–28.0	–186.4	+ 23.8	–162.4	683.7

and other receipts than it spent for all purposes, including redemption of debt, in the New England region. Consequently, the Treasury had a balance in its account at the Boston Reserve bank which was available for transfer to those regions in which there was an excess of Government expenditures over receipts.[1]

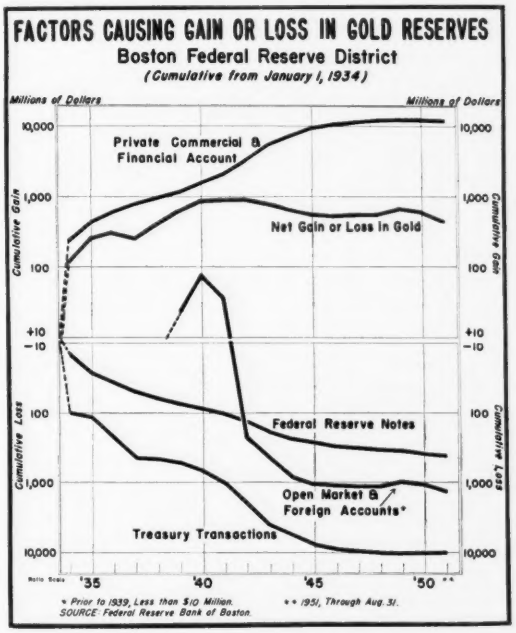
Inter-Reserve bank transactions are dominated by the operations of the Open Market Account. The New York Reserve bank completes all System Open Market sales and purchases. The other Reserve banks participate in the sales or purchases, and as a result gain gold from or lose gold to the New York Reserve bank. For example, when the Boston bank participates in sales by the New York bank, it gains gold through the Interdistrict Settlement Fund.

A portion of the New York bank's Open Market sales may be to New Englanders. If New England funds are used this results in payments being made from the Boston district to the New York district. When these payments are cleared through the Interdistrict Settlement Fund, the Boston bank will lose gold to the New York bank. Therefore, if New Englanders purchase Open Market securities sold by the New York bank in an amount exactly equal to the Boston bank's participation in such sales, Boston's gain of gold resulting from its participation will exactly offset its loss of gold resulting from the purchases made by New Englanders. The flow of gold is reversed when the New York bank makes Open Market purchases.

A perfect balance between the Boston bank's participation and New Englanders' sales or purchases can hardly be expected. This bank thus gains or loses some gold as a result of these transactions. New Englanders' sales and purchases of Open Market-type securities are included in the total of private commercial and financial transactions. It is not possible, therefore, at this stage of our analysis, to determine the exact gain or loss due to Open Market operations, but only the direct gain or loss in the transactions between the Reserve banks.

The New York bank allocates the interest it receives on securities held in the Open Market Account to the other Reserve banks on the basis of their participations. Each of the Reserve banks thus gains gold from New York as a result of these interest payments. Furthermore, each of the Reserve banks also participates in the New York bank's foreign transactions.[2]

Column 3 of the table indicates the extent to which Federal Reserve notes issued by the Boston bank have been carried or sent out of this district and spent elsewhere. The Federal Reserve Act prohibits a Reserve bank from reissuing notes originally issued by another Reserve bank. When notes of other Reserve banks are deposited in the Boston bank, it must return them to the issuing bank. Notes are returned through the Interdistrict Settlement Fund and Boston gains gold from the issuing bank. In turn, the Boston bank loses gold to Reserve banks which return Federal Reserve notes issued in the First District.



When the Treasury acquires Federal Reserve notes it reimburses itself from a redemption fund which each Reserve bank is required to maintain. The redemption represents a further, although very small, loss of gold reserves by each district. The Boston bank's loss in this respect has been included in column 3.

Private Commercial and Financial Transactions (column 2) is the difference between the total gain or loss of gold reserves (column 6) and the sum of known transactions included in columns (1), (3) and (4). The real significance of the private account lies in the exact nature of the transactions involved—do they represent trade in commodities, services, or capital funds? If the region is a net exporter of capital funds, a creditor region, and is not to lose gold as a result of the outflow, it must have a favorable (inflow) balance in the sum of its commodity and service payments. Available data indicate that New England experiences a large inflow of funds from services and thus may be able to support, under these conditions, a deficit (outflow) in its commodity trade account.

Analysis of the region's over-all balance of payments focuses attention on what determines the size of its payments and receipts in each general type of transaction. It increases interest in the productivity of capital in New England as compared to other regions; the competitive strength of its manufacturers, their relative costs of manufacture and distribution; and the region's terms of trade, prices of "imports" compared with prices of "exports" and relative changes in each. An accurate compilation of all interregional payments would facilitate an analysis of basic competitive forces.

[1] The Treasury, from time to time, accumulates more gold than it normally holds (to meet certain legal requirements such as the reserve against outstanding United States notes and U. S. Treasury notes of 1890). It may deposit this excess gold in the Interdistrict Settlement Fund to the accounts of those Reserve banks at which the Treasury at that time wishes to increase its balance. The Boston bank has received such deposits during the period under study. They are insignificant, however, relative to the total of Treasury transfers. Total deposits were $264 million during the period as compared to total transfers of $10,812 million.

[2] Foreign transactions may include deposits made in foreign central banks or loans extended to them. An increase in either of these accounts results in a loss of gold by the participating Reserve bank to the New York bank. A decrease causes a gain of gold from New York. Foreign transactions also include foreign deposits in the New York Reserve bank. An increase in foreign deposits results in a gain of gold by the participating Reserve banks; a decrease causes a loss of gold.

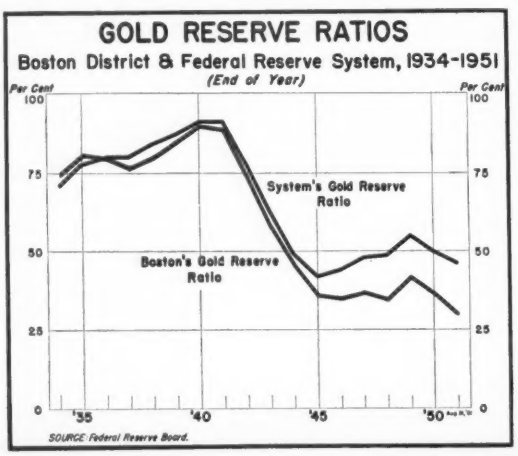
Cumulative Effects of Gold Flows

The forces which work to alter a region's banking structure, by causing a gain or loss in gold reserves, are cumulative from year to year. The present banking structure is the net result of all of these forces working through all of the past. Each of the factors shown in the above table has been cumulated annually and is plotted in the accompanying chart (page 3) to illustrate better the effect of past gains and losses of gold on the present position of the Boston Reserve bank.

The Federal Reserve Bank of Boston gained $435 million of gold reserves from January 1, 1934 to August 31, 1951. The Bank began this period with gold reserves of $249 million and thus had on hand at the period's close gold reserves of $684 million. As indicated by the blue line in the chart, this net gain of $435 million resulted from a gain of $918 million to the end of 1942 and a loss of $483 million after that date. Nearly half the gain from 1934 through 1942 was lost from 1943 to 1951.

The cumulative outflow of Treasury and Reserve bank transactions since 1942 has outweighed the cumulative inflow due to private commercial and financial transactions. Although this Bank gained through Treasury transactions in 1950 and 1951 for the first time and lost through private transactions, the amounts involved become insignificant in the cumulative picture. Whether this change in Treasury transfers from an outflow to an inflow is indicative of a basic trend is an important question for further study.

The Federal Reserve Act requires that each Reserve bank maintain gold reserves equal to 25 per cent of its outstanding note and deposit liabilities. When a Reserve bank loses gold, its gold reserve ratio falls unless its note and deposit liabilities decline in proportion. For every dollar of gold lost, a Reserve bank must lose four dollars of note or deposit liabilities if it is to preserve the same gold reserve ratio. In interdistrict clearings, excluding inter-Reserve bank transactions, gold and liabilities are lost in equal amounts. The gold reserve ratio must, therefore, decline as a result of losses through clearings. The gold reserve ratio will also fall if note and deposit liabilities of a Reserve bank rise and the gold holdings remain unchanged.



An accompanying chart indicates the influence of adverse clearings and an increase in note and deposit liabilities on the reserve ratios of the Boston bank and the System as a whole. Both the System's and the Boston bank's note and deposit liabilities increased almost twofold from December 1941 to December 1945: from $22.9 billion to $42.8 billion for the former and from $1.4 billion to $2.4 billion for the latter. The resulting sharp decline in gold reserve ratios shows clearly on the chart.

Boston's gold reserve ratio has been below that of the System as a whole since 1936. The gap between the two ratios has been widening steadily since 1942 and is very pronounced after 1946. This gap can be understood only in terms of Boston's relative gold holdings and its share of the System's total note and deposit liabilities.

The First District's relative gold holdings fell from 5.7 per cent of the System's total in 1942 to 3.2 per cent in August 1951. Its relative note and deposit liabilities, however, fell during the same period by less than one percentage point, from 6.1 per cent to 5.2 per cent. A larger decline in Boston's share of the nation's gold reserves as compared to the decline in its share of note and deposit liabilities resulted in its reserve ratio falling below that of the nation as a whole.

During 1951, the Boston bank's ratio has been approaching the legal minimum. Alterations in the Boston bank's participation in the System's Open Market Account have enabled it to maintain a working reserve ratio of approximately 30 per cent in this period. Maintenance of the reserve ratio by this means, however, does not alter the possibility that the tendency to lose gold is symptomatic of underlying difficulties deserving careful study.

Conclusions

An analysis of why a region loses or gains gold reserves must rest ultimately on the nature of its interregional payments. The study of "gold flow" data presented here provides more than a description of what gold flows have occurred and their effects on the reserve position of the region. It identifies certain important interdistrict payments, thus providing the basis for their immediate analysis. It provides the starting point for the study of the effects of interregional payments on the reserves of the region's commercial banks and on its money supply.

Very little is known about the details of private commercial and financial payments. The balance of these payments, however, is a reflection of the basic structure and growth of the region's economy. The program now being sponsored by this bank will attempt to reconstruct the private interregional payments in terms of the nature of the transaction — whether due to commodity trade (by major industry groups), to service transactions or to the flow of capital funds.

Although a complete picture may never be realized, certain important elements may be reconstructed. This bank plans to present in subsequent issues of the *Monthly Review* analyses of those segments of the economy for which interregional payments may be compiled. It will also continue the monetary analysis begun here, extending it to the factors affecting commercial banks' reserves and analyzing the relationships of this region with each other region.

REVIEW OF THE THIRD QUARTER:

Over-all Stability Despite Sharp Adjustments

Two strong cross-currents dominated the stream of industrial activity in New England during the third quarter of 1951. The pressure of accumulated inventories at retail, wholesale and manufacturing levels caused cutbacks in orders, lower production and some unemployment in consumer goods lines. At the same time, a buildup in the defense program increased the pressures to expand production of defense items, to increase capacity, and also to meet the problems of metal scarcities. On balance total employment stabilized, prices drifted down and then turned up slightly, defense orders expanded, and civilian orders improved seasonally at the end of the quarter.

MANY MANUFACTURERS in New England saw their orders slump beyond their expectations for a slow summer season. Industries such as textiles, jewelry and shoes experienced one of their worst quarters since the end of World War II. Without the over-all support of expanded defense spending, the manufacturing segment of the region's economy might have scraped bottom during the recent period of inventory adjustments and cautious buying. However, signs of improvement appeared at the end of the quarter.

Orders received in July by manufacturers in Massachusetts declined 20 per cent from their level in June, according to the Associated Industries of Massachusetts. Orders in the durable-goods categories dropped more sharply than in the nondurables. In August the trend reversed as orders for durable goods expanded about 25 per cent. Furthermore, an indication of a seasonal upturn in business activity appeared in the changing pattern of business inventories. The downward drift of work-in-process inventories during July and August halted in September. Finished-goods inventory turned downward as orders improved.

Buying at retail stores in New England during the third quarter remained below the exaggerated post-Korean levels of a year ago, but gradually reduced inventories as stores curtailed their forward commitments. Sales of durable consumer goods continued to lag behind those of last year despite the relaxation of Regulation W terms. Automobile sales in Massachusetts failed to improve in September and were about 36 per cent below year-ago levels during the third quarter. There was no pronounced shift of consumer spending to soft goods during the third quarter in New England.

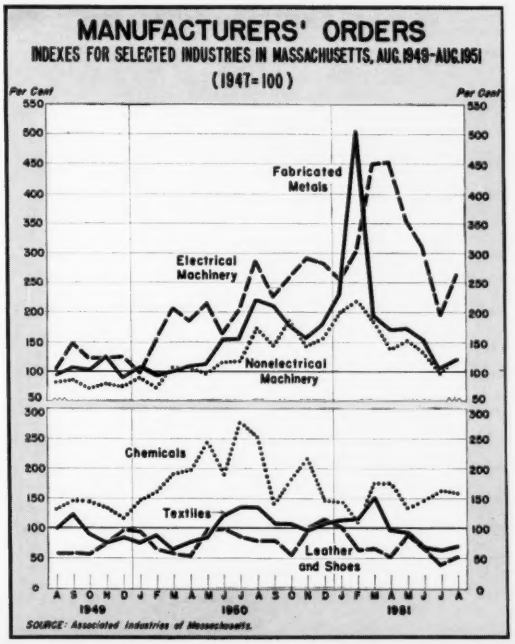
Total **nonagricultural employment** fluctuated in New England during the third quarter almost entirely because of small changes in manufacturing employment. Nonmanufacturing employment remained steady at levels about five per cent above those in 1950.

Since October 1950, total **manufacturing employment** has not varied more than 1.3 per cent above or below a level of 1,537,000 workers. In the third quarter, for example, an employment drop of 18,000 workers from June to July had substantially disappeared by the end of September. Nevertheless, the relatively small variations in the total concealed very sizable employment changes in particular industries during 1951. Steady expansion in the metal industries offset declining employment in textiles. By mid-August textile employment in New England had dropped 13 per cent from its February level.

Average weekly earnings in New England manufacturing employment dropped slightly below second-quarter levels, despite the net shift to the durable-goods industries, but remained well above average earnings for the third quarter of 1950.

As a result of divergent changes in manufacturing activity, there was unemployment in some communities and a labor shortage in others. During August nearly 20 per cent of the unemployment insurance claims filed in Massachusetts originated in the woolen and worsted textile center of Lawrence.

Defense activity in New England continued to grow during the third quarter. Proposed investments using certificates of necessity expanded rapidly in the nation during the third quarter. Sixteen per cent of the value of all approved certificates of necessity was granted in the seven weeks before the moratorium which commenced August 18. During that period, New England producers were granted rapid amortization benefits on

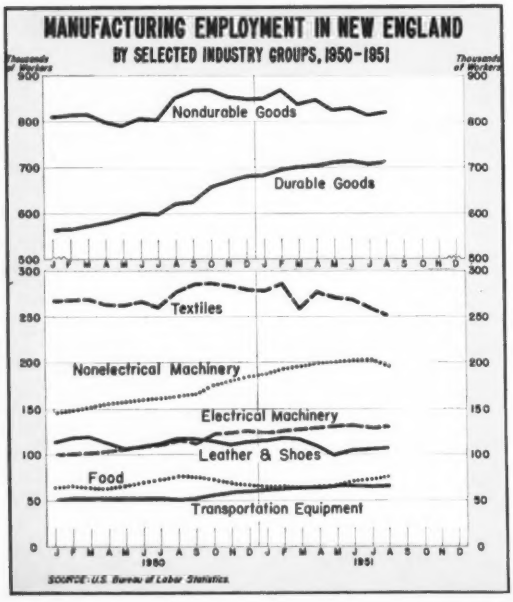


a proposed investment of $33.5 million, an amount slightly less than two per cent of the national total of certificates granted.

Although business borrowing in New England usually rises seasonally during the late summer, **business loans** at the region's banks declined slightly during the last three months. On October 4, however, they were still about $114 million (13 per cent) above the level at the end of 1950. Loans to finance direct defense contracts and defense-supporting activities, principally loans to metal manufacturers and public utilities, continued the expansion begun last spring. A large part of these funds was used for plant and equipment expenditures. Non-defense loans underwent further declines.

Average wholesale prices sank lower during the third quarter, while consumers' prices continued to rise gradually. Spot primary market prices dropped about five per cent in the quarter, according to the Bureau of Labor Statistics' daily index of 28 basic commodities. In mid-September the index began to turn upward, and the more comprehensive weekly index of wholesale prices followed suit shortly. Consumers' prices in Massachusetts rose gradually during the third quarter, and averaged about six per cent higher than in the third quarter of 1950.

The Federal Reserve Board's index of **industrial production** fell from 221 in June to 212 in July, the lowest level it has touched since September 1950. The decline reflected widespread extension of plant vacations, particularly in the nondurable-goods industries, production cutbacks because of restrictions on materials in some hard-goods lines, and curtailment of production to reduce inventories. During August and September, industrial production in the nation gradually increased. In September the index reached a level of 219 per cent of the 1935-39 average. Although this exceeded year-ago levels by three per cent, it remained below the average of 222 maintained during the first half of 1951.



The housing program reacted less drastically to credit restraints and other emergency restrictions than many people expected early in the year. Reports indicate that non-farm housing starts in the nation maintained the million-units-per-year rate during July and August. This was about 30 per cent below the number of units started in 1950 and about equal to the number of starts made in 1949.

Contracts awarded for nonresidential construction in New England during the third quarter of 1951 called for total floor space 32 per cent less than in the corresponding quarter of 1950, according to the F. W. Dodge Corporation. Floor area provided by contracts for commercial buildings declined by 52 per cent, while contracts for manufacturing space rose by 13 per cent.

Contracts awarded for the building of one- and two-family dwellings in New England during the third quarter called for 25 per cent fewer dwelling units in 1951 than in 1950. Reported valuations were down only 19 per cent, however, indicating continuation of the upward trend in building costs during the intervening period.

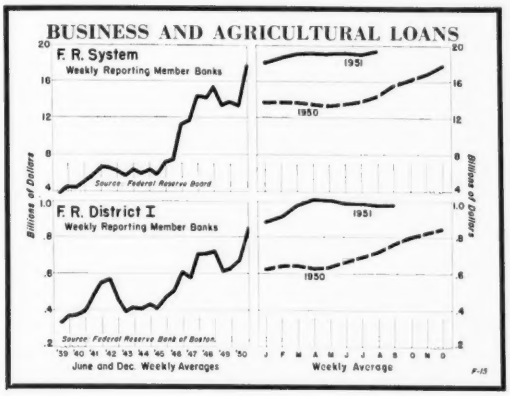
Durable-Goods Industries Were Active

In the durable-goods industries, plants producing defense items absorbed workers with transferable skills from plants feeling the effects of material shortages. Although shortages of critical materials became more serious and caused scattered shutdowns and shorter workweeks in September, they had not yet become a major factor in production planning. The non-availability of skilled labor was a more serious consideration. In some Massachusetts areas, where demand had exhausted the available pool of skilled male labor, plants hired women to train as machine operators.

Machine-tool builders have extensive backlogs of orders and are booking more or negotiating for them. One Connecticut firm recently received a $33 million order. In Rhode Island the industry is very active on defense orders and there are no present signs of slowing down, even though a work stoppage at one of New England's largest plants caused a temporary decline in the level of employment. The volume of orders received by manufacturers of machinery in Massachusetts dropped in July, but signs of a pickup appeared in August when orders rose by 24 per cent.

The **electrical apparatus** industry reflected the conflicting forces of defense and civilian demand. The heavy electrical machinery industry, bolstered by huge government orders, continued its steady but unspectacular expansion. Establishments producing small parts used as materials-of-war took on many workers. Further curtailment of employment during August occurred in the electrical plants dependent principally on civilian business, such as automotive electric equipment, television and radio parts. This segment of the industry, however, was of relatively minor importance, and the industry as a whole moved ahead to higher levels of employment and production.

Primary metal and fabricated metal products industries continued to expand during the third quarter. The expansion, however, was less than a normal seasonal increase and reflected a combination of problems. Shortages of metals slowed down expansion in some cases. For example, a wire mill in Worcester was obliged to


BUSINESS AND AGRICULTURAL LOANS
F. R. System
Weekly Reporting Member Banks
1951
1950
Billions of Dollars
Source: Federal Reserve Board
F. R. District I
Weekly Reporting Member Banks
1951
1950
Source: Federal Reserve Bank of Boston
'39 '40 '41 '42 '43 '44 '45 '46 '47 '48 '49 '50
J F M A M J J A S O N D
June and Dec. Weekly Averages
Weekly Average
F-15

close for one week during August for lack of steel. Copper and brass rolling mills and foundries were restricted in their operations by metal shortages, and their backlogs of unfilled orders at the end of August were equivalent to about three times the quantity of copper they received during the month. At the same time, some fabricated metal shops were catching up on their backlogs of orders and reported a marked decrease in business.

Shipbuilding and aircraft production sparked an expansion in the transportation-equipment industry during the third quarter. Appreciable cuts in employment at automobile assembly plants failed to materialize, but are currently anticipated. The volume of work under contract for the shipyards rose significantly. Contracts received for fleet oilers, submarines, and destroyers will provide sizable employment. Labor disputes did not halt the general expansion in the aircraft industry. By August, these combined sources had swelled employment in the transportation-equipment industry by 29 per cent during the year.

Steel ingot operations in New England during the third quarter of 1951 were at the average rate of 86 per cent of capacity, a reduction of four per cent from the preceding quarter, but an increase of five per cent over the corresponding period in 1950.

Demand for **pig iron** from foundries and machine shops was lighter than in the second quarter. Foundry inventories of iron in September were at the top of regulation limits in many instances. Pressure for deliveries eased, except where shops had defense contracts.

The **nonferrous metals** industry faced several aggravating problems. Because of work stoppages at copper mines during late August and early September the industry lost an estimated 30,000 tons of irreplaceable domestically mined copper. A Chilean dockworkers' two-week strike tied up additional tons of ore that would have moved to this country for fourth-quarter consumption. Scrap practically stopped moving to foundries and secondary smelters due to price ceilings. This situation forced brass mills around Waterbury and Bristol and wire mills in Rhode Island to rearrange already short schedules and in some cases to suspend operations temporarily.

Ordnance plants in New England continued the steady expansion which began after the outbreak of the Korean War. Since August of 1950, the industry has expanded nearly a third. In addition to hiring many more women, the industry is spreading by subcontracting. Some conversion to ordnance manufacturing is evident. One typewriter plant is tooling up for rifles and a textile-machinery builder is preparing to produce machine guns and parts.

The market for New England **softwood lumber** was generally firm during the quarter. Demand for northeastern spruce was moderately weak and sellers felt the competition of spruce from western Canada. The white pine market could not be called brisk but signs of strengthening appeared at the end of September.

The **hardwood lumber** market retained strength sufficient to keep prices at ceiling levels with minor exceptions. Hardwood flooring displayed unexpected strength in September and prices were rising.

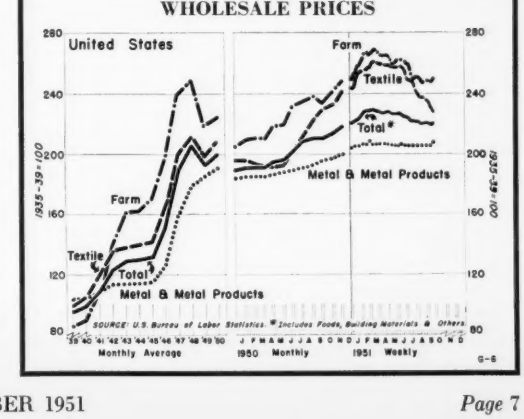
The September **furniture** market was encouraging for New England manufacturers. Good business that they had enjoyed through the quarter began to look even better toward the end. Retail outlets ordered freely, apparently needing inventory replacements as a result of active consumer buying. One large producer operated on a 50 per cent overtime basis throughout the quarter and is booked through January 15 at the expanded rate of production.

Nondurable-Goods Production Was Slack

Activity in nondurable-goods manufacturing plants slacked off during the third quarter. Manufacturers and distributors alike attempted to work off accumulated inventories and to set the stage for an expected fall-season pickup in business.

Mills with government contracts provided the hard core of **textile** employment during the third quarter. Some textile mills closed, however, and others operated on reduced working schedules or extended their vacation periods because of the lag in civilian orders. Wage rate increases which became effective after Wage Stabilization Board approval had a restricted effect on employee incomes. Accumulated inventories and uncertainty over prices of cotton, wool, and man-made fibers in a declining market generated caution and reductions in forward commitments. New England textile employment in August was 26,000, almost ten per cent less than it was in August 1950.

At the end of the quarter signs of improvement began


WHOLESALE PRICES
United States
Farm
Textile
Total*
Metal & Metal Products
1935-39=100
SOURCE: U.S. Bureau of Labor Statistics. *Includes Foods, Building Materials & Others
'39 '40 '41 '42 '43 '44 '45 '46 '47 '48 '49 '50
J F M A M J J A S O N D J F M A M J J A S O N D
Monthly Average
1950 Monthly
1951 Weekly
G-6

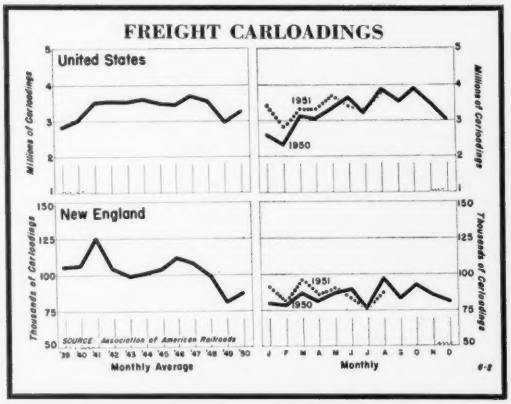
to appear. Mills received an increasing number of inquiries from civilian sources. Cotton and wool prices firmed and mills hoped for a change in buyer attitudes as retail sales of soft goods improved, stores reduced their inventories, and the time before the end of the fall-winter season shortened. Some woolen mills reopened to produce civilian lines, and woolen and worsted firms throughout New England bid successfully on a sharp competitive basis to supply military requirements for woolen-nylon shirting and worsted-nylon serge. Rayon weaving mills, however, still felt the chill from stocks in the hands of converters and jobbers.

Slow conditions prevailing in New England **apparel** shops during the spring months carried over into the fall season. Although the industry expanded seasonally after the vacation shutdowns in early July, new civilian business did not come up to expectations. Plants working on government orders were going at full tilt, but spotty conditions prevailed in much of the rest of the industry with part-time work prevalent in many areas. High-priced inventories continued to be a problem to both manufacturers and retailers.

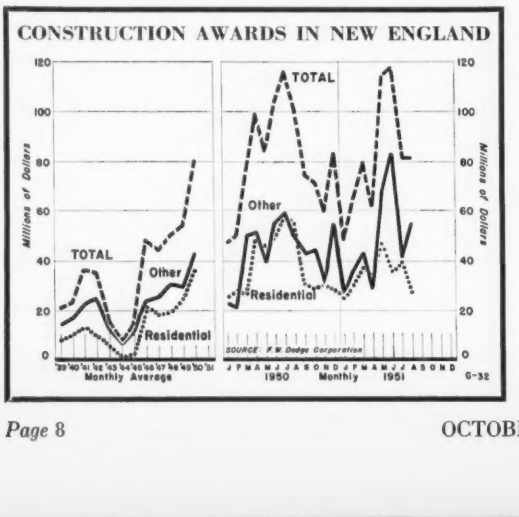
Over-all employment in the region's **rubber** plants dropped slightly from the high levels reached in the second quarter of 1951, but in August was still 12 per cent ahead of its year-ago level. Easing of material controls aided manufacturers of latex products, but rising wages and increased synthetic rubber prices caused growing concern in the industry.

Demand for sulphite grades of **paper** continued strong during the quarter, and fine-paper mills in New England maintained satisfactory order backlogs at normal operating rates. Demand for **paperboard,** particularly for the packaging of soft goods, was insufficient to absorb production, and inventories mounted. New wood-pulp prices remained at ceiling levels though the supply of unbleached kraft grades became noticeably easier. The normal fall pickup had not developed at the end of the quarter and early market prospects still remained uncertain.

Dull conditions prevailed in New England **shoe and leather** plants. Although employment rose in July and August, the increase was less than usual at this time of year. In August there were eight per cent fewer workers employed than in the same month of last year. Several plants which had been busy producing shoes on government order fulfilled their contracts and then found it necessary to curtail operations. Fall runs were short in many plants and part-time operations were general by the end of August. Stocks on hand at some shoe plants are still large. Price cuts, resulting from lower leather prices, were made by a number of firms but failed to stimulate retail sales appreciably. New England shoe output for the first eight months of the year averaged five per cent below that in the same period of 1950. In recent months, however, shoe production in the region has held up better than production in the rest of the country. A flurry of leather buying in mid-September resulted in a pickup in operations for side leather tanners, but the improvement was short lived.



The usual fall expansion of operations in New England **jewelry** plants has been hampered this year by the lack of new orders, growing material shortages, and the continued existence of large inventories in the hands of both manufacturers and retailers. The volume of new credit business has been limited for some firms by a slowdown in collection for goods sold earlier in the year. During the quarter, the industry benefited from an easing of restrictions on copper usage. It is expected that the industry will be forced to use substitutes when Christmas merchandise is completed. So far, defense business has fallen short of expectations and immediate prospects are not promising.

New England **printing and publishing** plants have shared in the quickened tempo of business activity, but not to the extent of many other industries. Within the region the largest gain was registered in New Hampshire, principally because of the removal of a large greeting card plant from Massachusetts. As in many other lines, rising costs and difficulty in obtaining materials continue to plague the industry.

The **chemical industry** in New England expanded employment by 12 per cent during the year following the outbreak of the Korean war. During the third quarter, however, employment in the industry fell off slightly from the second quarter peak. Further expansion is indicated by the size of industry requests for certificates of necessity. By August 18, New England chemical firms had been granted certificates covering $10.2 million of proposed investment. This represented 1.7 per cent of the total proposed investment authorized for the United States.